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FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of)

Replacement of Part 90 by Part 88)
to Revise the Private Radio Land)
Mobile Radio Services and Modify)
the Policies Governing Them)

PR Docket No. 92-235

REPLY COMMENTS OF THE
ALARM INDUSTRY COMMUNICATIONS COUNCIL

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SUMMARY

The Alarm Industry Communications Committee (AICC) continues to support the Commission's channel splitting proposal, at least for the central station spectrum, so long as the Commission affords co-primary status for central station fixed signalling currently performed on the offset frequencies, so that it can be relocated on a protected basis to some of the newly created narrowband channels. In the absence of such protection, AICC supports those who oppose the channel splitting, or urge a postponement of its implementation. AICC also stresses the need for the Commission to clarify that the paired response frequencies in the 465-466 MHz band are reserved for central station use only, consistent with the reservation of the transmit frequencies in the 460-461 MHz band.

AICC notes the widespread opposition to the Commission's proposed power/antenna height restrictions, and restates its opposition to those restrictions. While AICC believes the restrictions should be abandoned in their entirety, it supports as a less objectionable alternative to the Commission's proposal, the suggested "safe harbor" table which is set forth in the comments of the Land Mobile Communications Council (LMCC).

AICC also supports those commentators who urge that the Commission retain the "20 foot antenna height rule" which is

Part 88. AICC also urges the Commission to retain flexible licensing procedures for central station fixed signalling, so that each of the protected premises do not have to be separately licensed.

AICC opposes the proposal of NABER to consolidate the frequency coordination function into a single entity. It is important that the Central Station Alarm Association (CSAA) retain exclusive coordination rights over the central station frequencies, since these frequencies are to be reserved for central station-only use. In the absence of such restrictions, a single, large coordinator may not understand the needs and operating restrictions of alarm systems, and may coordinate incompatible operations on the same frequency.

While AICC advocates that central station alarm operations be placed into the Public Safety Pool (pursuant to the restrictions suggested in its comments), AICC is willing to support, as a less desirable alternative, the creation of a non-governmental safety related user pool, so long as this pool is restricted to operations such as central stations, which are dedicated to handling safety related communications of an urgent nature.

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The Alarm Industry Communications Committee (AICC) hereby submits its reply comments in the above captioned proceeding. As discussed in greater detail below, many of the commentors have raised valid issues and suggested viable alternatives to the FCC's proposed rewrite of Part 90 of its Rules, which deserve full consideration by the Commission. AICC supports a number of these alternative proposals, such as the concept of a "safe harbor" power/antenna height table, in lieu of the Commission's proposed strict power limits; and the creation of a safety-related industrial user pool for those non

newly created narrowband channels; (3) the need for continued flexible licensing procedures for these co-primary fixed signalling operations, including retention of the "20 foot antenna height rule" which is currently in place; (4) the need for exclusive coordination of central station frequencies to



equipment has entered the marketplace to allow operation on 5 and 6.25 KHz channels. See LMCC comments at pp. 7-12. In this same vein, the American Association of State Highway and Transportation Officials (AASHTO) urges the Commission to phase in narrowband use over a period of 15 years, starting from the date on which viable commercial equipment is type accepted for narrowband operations. See AASHTO comments at p. 4.

AICC certainly agrees that the need for the telecommunications industry to fully amortize existing equipment and to have reliable, cost-effective narrowband equipment for the proposed transition, are two conditions which must be met if the Commission's refarming proposal is to be successful. However, AICC believes that, at least for the alarm industry, the Commission's proposal to create two narrowband channels (6.25 KHz in the UHF band) and one 12.5 KHz channel out of each existing 25 KHz channel is the best course of action to follow, provided that accommodations are made for the current offset operations so vital to the alarm industry. Indeed, while AICC is not prepared to embrace the short transition period proposed by GEC-Marconi and Cycomm Corporation, it believes that the creation of a 12.5 KHz channel and two 6.25 KHz narrowband channels in the UHF band would best serve the alarm industry by placing pressure on equipment manufacturers to devote their resources towards development of narrowband technology. In the absence of such

pressure, manufacturers may not have the necessary incentive to move expeditiously towards the narrowband transition. AICC believes that the industry's concern over the availability of narrowband equipment can be satisfied by adoption of AICC's proposed "safety valve" procedure, whereby the industry can petition the Commission to postpone its second phase of channel splitting (i.e., splitting the remaining 12.5 KHz channels into two 6.25 KHz narrowband channels), upon a showing that reliable, affordable equipment is not available. In this way, the industry will not be forced onto a bandwidth for which equipment is truly not available; at the same time, the incentive for manufacturers to develop true narrowband equipment will not be removed. Indeed, AICC believes that the sooner that the transition to 6.25 KHz channels is implemented (following a reasonable amortization period), the better for the alarm industry, since radio users in the industry may be able in many instances to avoid replacement of their radios twice -- upon transition to 12.5 KHz and then again at 6.25 KHz.¹

AICC must maintain a record of all such petitions.

discussed in AICC's initial Comments, continued alarm industry use of the frequencies to be created from channel splitting is vital to the ability of this industry to provide its public safety-related services, namely, the provision of break-in and fire detection, as well as medical alert services. Of particular importance to the alarm industry is the ability to send its fixed alarm signals between protected premises and the central station as is currently done on the effect

central stations (460.900 through 461.000 MHz), including the newly created narrowband channels in between; however, the allocation chart inexplicably fails to make the same reservation for the mobile response channels currently allocated under Rule Section 90.75(b) (i.e., 465.900 to 466.000 MHz). See Senses' comments at p. 5. Given the Commission's prudent reservation of the transmit channels for the vital public safety-related central station operations, it would appear that the omission of the central station reservation for these response channels (including the newly created narrowband channels in between) is an inadvertent oversight. If this is the case, it is urgently requested that the Commission correct this oversight by placing the same "central station only" limitation in the margin of proposed Rule Section 88.617.²

dispatching of security personnel, and would hinder the operation of two-way "polling" equipment that is in widespread use today. As noted by Senses, the elimination of the two-way capability would "eliminate all central station repeater operations, voice and data, both existing and future." See Senses' comments at p. 5. Moreover, two-way data radio systems can facilitate advanced, efficient alarm operations. Whether for two-way data or for mobile operations, central station radios require a certain separation between the transmit and response channels, in order to avoid intrasystem interference. This separation will not be provided if the paired frequencies are not reserved for central station use. The central station operations that go to the expense of accommodating the Commission's narrowband proposal should not be penalized by loss of these frequencies. The proposed rule change would also force the industry towards a particular technology (one way operation) without justification in the record.

B. The Record Supports Protection of Current Offset Operations.

Most commentators agree with AICC that current offset operations must be protected by being given some form of co-primary status upon implementation of the Commission's channel splitting proposal, since the ability of offset operations to continue on a secondary basis following the transition to narrowband channels will be eliminated by the lack of spectrum between primary use frequencies. See comments of Senses

International at p. 5, American Petroleum Institute at p. 25, Coalition of Industrial and Land Transportation Land Mobile Radio Users at pp. 17-18, Motorola at p. 27, National Association of Business and Educational Radio at pp. 22-23, Utilities Telecommunications Council at p. 37. Protection of fixed alarm signalling on offset frequencies is particularly crucial, since the fixed signals sent over these offset channels are by definition used to alert appropriate public safety officials about a break-in, fire or medical emergency.

Some commentators recommend that offset operations be accommodated by moving them to other frequency bands. In particular, Advanced Mobilecomm recommends migration of all such low power operations to the 2 GHz band. See Advanced Mobilecomm Comments at p. 12. AICC opposes this suggestion, since forced migration of the offset alarm operations to such higher band would (1) strand substantial investment in current equipment; (2) impose considerably higher replacement costs on the industry due to the high price of microwave equipment; and (3) require the replacement of vast amounts of easily installed low power systems now operating in millions of customer premises, with much bulkier 2 GHz equipment that requires line-of-sight communications. Indeed, the Commission has just concluded its rulemaking in ET Docket 92-9 to require existing 2 GHz licensees to migrate from this band, so as to accommodate the licensing of emerging technologies, such as personal communications services (PCS). The migration of

millions of alarm customers to the 2 GHz band would be inimical to the development of the emerging technologies.

LMCC follows a much more sensible approach by recommending that offset operations be migrated to the new channels to be created from the Commission's channel splitting proposal. Under LMCC's plan, the Commission would designate some portion of the current offset channels as co-primary, "site specific" frequencies available for low or high power operation. See LMCC Comments at pp. 7-8. This designation would take place effective January 1, 1994. Id. Another portion of the current offsets would remain allocated to low power itinerant use, which would continue to be a secondary use of the channel. Id. The American Petroleum Institute (API) supports the LMCC plan, and recommends that low power offset operations be given primary status. See API Comments at pp. 21, 25-26. LMCC's plan is premised on the Commission's adoption of LMCC's alternative frequency splitting scheme, whereby the current 25 KHz channels are split into two 12.5 KHz channels.

AICC supports the concept underlying LMCC's plan, with certain modifications. As discussed above, AICC supports the Commission's proposal for channel splitting, whereby the first stage would split each 25 KHz channel into one 12.5 KHz channel, with the creation of a narrowband 6.25 KHz channel on either side of this main frequency. AICC recommends the

~~migration of the offset operations adjacent to each of the~~

original 25 KHz channels to one of the newly created 6.25 KHz frequencies, with the co-primary basis urged by LMCC. This would provide the requisite protection for fixed signalling currently performed on the offset frequencies, while at the same time creating from each 25 KHz channel an unused 6.25 KHz ~~frequency~~ ~~for future licensing~~. Thus even with

"mobiles," but would accord the co-primary protection needed in light of narrower bandwidths.³

AICC also notes that API urges co-primary status for offset fixed signalling operations, but suggests that (as an alternative proposal) this co-primary status be afforded to operations in rural areas. See Comments of API at pp. 25-26. However, at least for central station fixed signalling on the offset frequencies, such rural-only exemption would not be feasible. A majority of fixed signalling on the offset channels takes place in urban and suburban areas, where both population and crime rates are much higher.

II. It is Critical that the Commission Retain the 20 Foot Antenna Rule and Other Flexible Licensing Measures for the Former Offset Operations.

At least two commentors, Senses International, Inc. at p. 8 and Bay Alarm Company at p. 4, concur with AICC in urging the Commission to retain the flexible antenna height rule which currently applies to fixed central station signalling on the offset frequencies. Rule Section 90.267(a)(6)(ii) currently allows the tip of an antenna operating on the central station offset frequencies to extend up to 20 feet above any manmade structure, including antenna towers. This

³ In the event that LMCC's proposal to split each channel into two 12.5 KHz channels is adopted, AICC would recommend that fixed signalling on the offsets be allowed to remain where they are now located. Central station alarm signalling would utilize the newly created 12.5 KHz channel on a co-primary basis. Where coordinated with potential co-channel users, voluntary migration to narrower 6.25 KHz channels should be allowed.

allows alarm companies to mount the antenna on the houses, buildings and other protected premises for signalling back to the central station without separate licensing for each of the protected premises. The Commission's proposed Part 88 rewrite appears to change this policy, so as to restrict the antenna height for offset operations to only 25 feet above ground level. Since many residences, as well as businesses, are greater than 25 feet above ground level in height, it is respectfully submitted that the Commission's proposed antenna height restriction is unreasonable, and would be adverse to the public interest by precluding the expeditious installation of alarm systems. Indeed, there are urban areas in which it may be impossible to mount an antenna anywhere under the proposed rule, because all of the building heights are greater than 25 feet above ground level. While AICC therefore concurs in the opposition of Senses International and Bay Alarm Company, it recommends that the flexible installation and licensing of central station fixed signalling currently enjoyed on the offset channels be extended to fixed signalling that is migrated on a co-primary basis to the newly created narrowband channels (as discussed above). The extension of the "20 foot" rule to such operations is critical to ensure the continued provision of vital public safety services to the public.

Moreover, AICC again wishes to stress the importance of extending to these fixed signalling operations the flexible

public interest would best be served by simply abandoning the proposed limits. As discussed in AICC's comments, these limits will ignore the legitimate needs of many private land mobile users for significant coverage without undue expense. There is no justification in the record for imposing the limits set forth in the Commission's Notice of Proposed Rulemaking (NPRM).

In the absence of an abandonment of this proposal, AICC would in the alternative support the adoption of the proposed "safe harbor table" suggested by LMCC. See LMCC Comments at pp. 14-20, and attached appendices. This safe harbor table would allow applicants to maximize coverages as needed, so long as protection is provided to co-channel operations. This approach has proven successful in other land mobile regulations, including Part 22 of the Commission's Rules. While AICC does not believe that the current power limit rule should be abandoned, if forced to choose between the limits proposed in the NPRM (which features an inflexible, "cookie cutter" approach), and the safe harbor table, the latter is clearly the superior alternative.

AICC also agrees with the proposal of LMCC to allow the submission of contour plots to demonstrate coverage needs and interference protection, where the safe harbor tables would be exceeded. AICC does not support those commentators who appear to advocate the submission of contour plots with all applications, in order to justify suggested coverage, because

this would create an unnecessary expense (and potential for delay) into what otherwise has been one of the most efficient licensing processes at the Commission.

A number of commentors support a total exemption of central station operations from the proposed power/antenna height limit. These commentors include Senses International at p. 8; A & M Electronics; Business Communications; JD Instruments; National Security Service; Shiver Security Systems Unlimited; Valley Alarm; RFI Security; Moon Security Services; Security Alarm; BarComm; and Texas Security Central. Bay Alarm Company likewise categorically opposes the application of the power and antenna height limits to central station operations. In the event that these limits are adopted, rather than the safe harbor table, AICC likewise urges an exemption for central station operations, given the vital public safety function they serve. This would be in keeping with the public safety exemption urged by the Associated Public-Safety Communications Officers, Inc. (APCO) at pp. 29-30 and the State of Nebraska at p. 4.

As a final matter, AICC supports commentors such as MCI Telecommunications in their opposition of the January 1, 1996 deadline for meeting the new effective radiated power limits. See MCI Comments at p. 4. If either the Commission's proposed limits or the safe harbor table of LMCC is adopted, the 1996 deadline is simply too early to allow amortization of equipment and budgeting for new equipment which must be

purchased as a result of the Commission's proposed restrictions. Not all transmitters are type accepted to be adjusted with regard to power, and would therefore have to be replaced; and many companies and organizations must budget for large scale radio replacement over a period of several years, and will be unable to replace the coverage they will lose under the proposed restrictions by purchasing the additional transmitters that will be needed, as well as site leases, power, and control links. The Commission should not impose the power restrictions (in whatever form adopted) on existing users any earlier than the year 2004, coincident with the implementation of the second phase of its proposed channel splitting. For new operations, the Commission should not apply these power restrictions earlier than 1998, to allow those licensees who have already committed to a five year budget plan to react accordingly.

IV. Commentors Universally Oppose the Commission's Vertical Channel Stacking Requirements for Frequency Coordinators as Inefficient.

The commentors in this proceeding almost universally oppose the Commission's plan to require frequency coordinators to "vertically" load licensees on to a shared channel until the channel is full, prior to coordinating a clean channel. Almost all commentors agree that this approach is nonsensical, where there are available, unused or lightly used

frequencies.⁴ One commentor, the Utilities Telecommunications Council (UTC), opposes vertical stacking because it raises serious public safety concerns. Because such stacking can produce channel crowding and unacceptable levels of co-channel interference, it will threaten the ability of vital public safety operations to communicate on the channel. See UTC Comments at pp. 13-14. UTC urges the Commission to allow licensees to be exempt from the vertical stacking proposal or scheme if they can demonstrate that an imminent danger to the public would exist if their system was unable to communicate due to channel crowding. Id. at p. 14. AICC supports UTC's proposal, and emphasizes that central station operations by definition report a crime, a fire, or a medical emergency. Therefore, it is respectfully submitted that central station operations should be exempt altogether from the channel stacking requirement.⁵

⁴ The commentors opposing the Commission's proposed "vertical stacking" proposal include American Mobile Radio Association, Inc. at p. 8; Coalition of Industrial and Land Transportation Land Mobile Radio Users at p. 28; Coastal Corporation at pp. 6-7; National Association of Business and Educational Radio (NABER) at p. 36; Utilities Telecommunications Council (UTC) at pp. 13-14; Senses International, Inc. at p. 6; Bay Alarm Company at pp. 5-6; A & M Electronics; Business Communication; JD Instruments; National Security Service; Shiver Security Systems Unlimited; Valley Alarm; RFI Security, Inc.; Moon Security Services, Inc.; Security Alarm Company; BarComm; and Texas Security Central.

⁵ While many commentors such as API recommend an exemption from the vertical stacking requirement in rural areas, with good cause, such exemption would not mitigate the harmful impact of the channel stacking requirement on central station operations. The majority of central station

V. Central Station Operations Should be Made Part of the Public Safety Pool, or in the Alternative, Should be Placed in a Separate Safety Related Pool for Non-Commercial Users.

AICC's Comments advocated that the Commission place central station operations into the Public Safety Pool rather than the Non-Commercial Pool, because of the integral role that central station operations play in protecting the safety of the public and in constituting a vital part of the loop that dispatches public safety entities in response to emergencies. In examining the comments filed in this proceeding, AICC notes that a number of entities urge the creation of a separate pool for non-governmental entities that provides safety related services by radio. For instance, UTC proposes a "public service industrial pool." See UTC Comments at p. 10. Coastal Corporation and Senses International, Inc. likewise urge the Commission to group together, and give priority to safety related operations. See Coastal comments at p. 5; see also Senses Comments at p. 6. The Colorado Division of Telecommunications similarly urges the creation of separate categories of users, including operations "directly related to life and property safety." See Colorado Division of Telecommunications Comments at p. 3.

AICC continues to urge that central station operations be included in the Public Safety Pool, with the conditions set forth at pp. 32-33 of its Comments. However, in the

operations are in urban and suburban areas, where crime rates and the risk of fire are increased significantly.

alternative, AICC would urge that the Commission create a separate pool for non-governmental entities that utilize their radio operations in a manner directly related to the protection of life and property. Appropriate restrictions should be placed on this pool, to include only those radio services which are dedicated to such safety related purposes (as opposed to the incidental benefit to any person of having a radio available at the time of an emergency), and which handle emergency response calls of an urgent nature. As discussed above and at length in AICC's Comments, central station operations are designed to utilize radio for responding to emergency situations which threaten life and property.

AICC opposes those commentators who support the proposed

~~abolition of the current rules and for the creation of~~

for these systems to be taken from the current private user allocations would contradict the purpose of the private radio services. This purpose is to make available to industry the spectrum needed to utilize radio systems tailored to the needs of business/industrial users. In the case of central station operations, it is even more critical that alarm companies be able to maintain control over their radio operations, rather than being forced to utilize a homogenous private carrier service.

VI. The Frequency Coordination Function Should not be Consolidated into a Single Coordinator.

NABER recommends consolidation of all current frequency coordination functions into "partnerships" that would constitute a single coordinator entity. See NABER Comments at p. 29. Similarly, Network USA and American Mobile Radio Association (AMRA) oppose the continued use of multiple frequency coordinating entities. See Network USA Comments at pp. 10-11; see also AMRA at pp. 6-7. AICC disagrees with these commentors, and supports those who urge that the Commission maintain the independent role of separate frequency coordinator entities. See e.g., Comments of API at pp. 14-15 and the Coalition of Industrial and Land Transportation Land Mobile Radio Users at p. 15. Coordination of central station operations in particular requires the expertise of CSAA, because of its in-depth knowledge of alarm operations. By retaining CSAA as the frequency coordinator, central

